

GARY R. HERBERT Lieutenant Governor

State of Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil Gas and Mining

JOHN R. BAZA
Division Director

May 28, 2008

James Fulton Denver Field Division Office of Surface Mining P. O. Box 46667 Denver, CO 80201-6667

Re: Formal Program Amendment Pertaining to the Utah Coal Rules: Sealing Of Wells, Catchall Statements, Intermittent Stream

Dear Mr. Fulton:

In accordance with 30 CFR 732.17, the Utah Division of Oil, Gas & Mining hereby submits a formal program amendment to the Office of Surface Mining in conjunction with modifications made to state rules for Utah's Coal Regulatory Program. As you may recall, the Utah Mining Association requested the study of rules in five areas in November 2006, and this process resulted in amended rules on the three topics of sealing of wells, catchall statements, and intermittent stream.

Your office has previously informally reviewed these modifications, and we appreciate your input into the informal rulemaking process via your letters dated September 4, 2007, November 26, 2007, and December 31, 2007. The rule amendments were later passed by the Board of Oil, Gas & Mining on March 26, 2008 and were published in the Utah State Bulletin on April 15, 2008.

Enclosed are the rule amendments in underline/strike-out format, comparisons to the respective federal regulations, rationale for the changes, and a letter from our Attorney General's Office regarding the amendments not conflicting with existing state law or rules.

If there are any questions, please contact Steve Schneider at <u>steveschneider@utah.gov</u> or 801-538-5328.

Sincerely,

John R. Baza
Director

Enclosures cc: Dana Dean



Utah Division of Oil, Gas & Mining
Formal Program Amendment to OSM
UMA Topic #3: Sealing of Wells
Comparison of Amended State Rule vs. Federal CFR, 5/2008

R645-301-551 Casing and Sealing of Underground Openings. When no longer needed for monitoring or other use approved by the Division upon a finding of no adverse environmental or health and safety effects, each shaft, drift, adit, tunnel, drill hole, or other opening to the surface from underground will be capped, sealed and backfilled, or otherwise properly managed, as required by the Division and consistent with MSHA, 30 CFR 75.1711 and all other applicable state and federal regulations as soon as practical. Permanent closure measures will be designed to prevent access to the mine workings by people, livestock, fish and wildlife, machinery and to keep acid or other toxic drainage from entering ground or surface waters. With respect to drill holes, unless otherwise approved by the Division, compliance with the requirements of 43 CFR 3484.1(a)(3) or R649-3-24 will satisfy these requirements.

30 CFR 817.15 Casing and sealing of underground openings: Permanent. When no longer needed for monitoring or other use approved by the regulatory authority upon a finding of no adverse environmental or health and safety effects, or unless approved for transfer as a water well under § 817.41, each shaft, drift, adit, tunnel, exploratory hole, entryway or other opening to the surface from underground shall be capped, sealed, backfilled, or otherwise properly managed, as required by the regulatory authority in accordance with § 817.13 and consistent with 30 CFR 75.1771. Permanent closure measures shall be designed to prevent access to the mine workings by people, livestock, fish and wildlife, machinery and to keep acid or other toxic drainage from entering ground or surface waters.

R645-301-631. Casing and Sealing of Exploration Holes and Boreholes. Each permit application will include a description of the methods used to backfill, plug, case, cap, seal or otherwise manage exploration holes or boreholes to prevent acid or toxic drainage from entering water resources, minimize disturbance to the prevailing hydrologic balance and to ensure the safety of people, livestock, fish and wildlife, and machinery in the permit and adjacent area. Each exploration hole or borehole that is uncovered or exposed by coal mining and reclamation operations within the permit area will be permanently closed, unless approved for water monitoring or otherwise managed in a manner approved by the Division. Use of an exploration borehole as a monitoring or water well must meet the provisions of R645-301-551 and R645-301-731. The requirements of R645-301-631 do not apply to boreholes drilled for the purpose of blasting.

R645-301-631.200. Permanent Casing and Sealing of Exploration Holes and Boreholes. When no longer needed for monitoring or other use approved by the Division upon a finding of no adverse environmental or health and safety effect, or unless approved for transfer as a water well under R645-301-731.400, each exploration hole or borehole will be plugged, capped, sealed, backfilled or otherwise properly managed under R645-301-551, R645-301-631 and consistent with 30 CFR 75.1711. Permanent closure methods will be designed to prevent access to the mine workings by people, livestock, fish and wildlife, and machinery and to keep acid or other toxic drainage from entering water resources.

Page 2 UMA Topic #3: Sealing of Wells

R645-301-765. Permanent Casing and Sealing of Wells. When no longer needed for monitoring or other use approved by the Division upon a finding of no adverse environmental or health and safety effects, or unless approved for transfer as a water well under R645-301-731.100 through R645-301-731.522 and R645-301-731.800, each well will be capped, sealed, backfilled, or otherwise properly managed, as required by the Division in accordance with R645-301-529.400, R645-301-551, R645-301-631.100, and R645-301-748. Permanent closure measures will be designed to prevent access to the mine workings by people, livestock, fish and wildlife, machinery and to keep acid or other toxic drainage from entering ground or surface waters.

Rationale for Change: This rule amendment includes additional clarification for the requirements pertaining to sealing of underground openings. The Utah Mining Association noted that the existing rule lacked much specification since openings will be capped, sealed and backfilled as required by the Division and consistent with MSHA. The Utah Mining Association suggested the rule be expanded to include additional specifications for sealing drill holes or reference other regulations which have specific guidance already in place. After analysis of the issue and alternatives during informal rulemaking, the recommendation was to include references to other government regulations already in practice pertaining to drill holes. Thus, the amended rule includes compliance with specific BLM rules or Utah Division of Oil, Gas & Mining's Oil & Gas Program rules as satisfying the requirements for drill holes.

The additional amendments that add "R645-301-551" to sections R645-301-631, 301-631.200, and 301-765 are intended for ease of reading by the coal operator. Thus, when a party is reading the requirements in the three noted rules, they will be referred also to the requirements of R645-301-551.

Utah Division of Oil, Gas & Mining Formal Program Amendment to OSM UMA Topic #4: Catchall Statements Comparison of Amended State Rule vs. Federal CFR, 5/2008

R645-300-130. Review of Permit Application.

131. General.

131.100. The Division will review the application for a permit, permit change, or permit renewal; written comments and objections submitted; and records of any informal conference or hearing held on the application and issue a written decision, within a reasonable time set by the Division, either granting, requiring modification of, or denying the application. If an informal conference is held under R645-300-123 the decision will be made within 60 days of the close of the conference, unless a later time is necessary to provide an opportunity for a hearing under R645-300-210.

131.110. Application review will not exceed the following time periods:

131.111. Permit change applications.

131.111.1. Significant revision - 120 days.

131.111.2. Amendments - 60 days.

131.112. Permit renewal - 120 days.

131.113. New underground mine applications - One year.

131.114. New surface mine applications - One year.

131.120. Time will be counted as cumulative days of Division review and will not include operator response time or time delays attributed to informal or formal conferences or Board hearings.

131.200. The applicant for a permit or permit change will have the burden of establishing that their application is in compliance with all the requirements of the State Program.

131.300. If, after review of the application for a permit, permit change, or permit renewal, additional information is required, the Division will issue a written finding providing justification as to why the additional information is necessary to satisfy the requirements of the R645 Rules and issue a written decision requiring the submission of the information.

30 CFR 773.7 Review of permit applications.

- (a) The regulatory authority shall review the application for a permit, revision, or renewal; written comments and objections submitted; and records of any informal conference or hearing held on the application and issue a written decision, within a reasonable time set by the regulatory authority, either granting, requiring modification of, or denying the application. If an informal conference is held under § 773.13(c), the decision shall be made within 60 days of the close of the conference, unless a later time is necessary to provide an opportunity for a hearing under paragraph (b)(2) of this section.
- (b) The applicant for a permit or revision of a permit shall have the burden of establishing that his application is in compliance with all the requirements of the regulatory program.

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UMA Topic #4: Catchall Statements

Note: There is not a direct comparison of R645-300-131.300 to a subsection of the CFR since this is new language being added to the state rules with the additional burden being upon the Division and not the coal operator. The above CFR applies to the general section.

Rationale for Change: This addition to the rule requires the Division to issue a written justification and decision if additional information is required to complete the review of a permit application, change or renewal. In the R645 coal rules, there are numerous points where the rule reflects a corresponding possible requirement such as "if required by the Division," "the Division may require," "if specified by the Division," and "if shown to be necessary." While some flexibility in the rules is necessary for specific situations, the Utah Mining Association requested this amendment to insure the Division would provide and demonstrate justification for additional information to complete the permit process.

Utah Division of Oil, Gas & Mining
Formal Program Amendment to OSM
UMA Topic #5: Intermittent Stream
Comparison of Amended State Rule vs. Federal CFR, 5/2008

Rule Change in part of R645-100-200.:

"Intermittent Stream" means (a) a stream, or reach of a stream, that drains a watershed of at least one square mile, or (b) a stream, or reach of a stream, that is below the local water table for at least some part of the year and obtains its flow from both surface runoff and groundwater discharge.

30CFR710.5

Intermittent or perennial stream means a stream or part of a stream that flows continuously during all (perennial) or for at least one month (intermittent) of the calendar year as a result of ground-water discharge or surface runoff. The term does not include an ephemeral stream which is one that flows for less than one month of a calendar year and only in direct response to precipitation in the immediate watershed and whose channel bottom is always above the local water table.

R645-301-535.210. Spoil. Rock-core chimney drains may be used in a head-of-hollow fill, instead of the underdrain and surface diversion system normally required, as long as the fill is not located in an area containing intermittent or perennial streams or ephemeral streams that drain a watershed of at least one square mile. A rock-core chimney drain may be used in a valley fill if the fill does not exceed 250,000 cubic yards of material and upstream drainage is diverted around the fill.

30CFR817.72(b)

(b) Rock-core chimney drains. A rockcore chimney drain may be used in a head-of-hollow fill, instead of the underdrain and surface diversion system normally required, as long as the fill is not located in an area containing intermittent or perennial streams. A rock-core chimney drain may be used in a valley fill if the fill does not exceed 250,000 cubic yards of material and upstream drainage is diverted around the fill. The alternative rock-core chimney drain system shall be incorporated into the design and construction of the fill as follows

R645-301-535.223. Grading may drain surface water away from the outslope of the fill and toward the rock core. In no case, however, may intermittent or perennial streams <u>or ephemeral streams that drain a watershed of at least one square mile</u> be diverted into the rock core. The maximum slope of the top of the fill will be 33h:1v (three percent). A drainage pocket may be

maintained at the head of the fill during and after construction, to intercept surface runoff and discharge the runoff through or over the rock drain, if stability of the fill is not impaired. In no case will this pocket or sump have a potential capacity for impounding more than 10,000 cubic feet of water. Terraces on the fill will be graded with a three to five percent grade toward the fill and a one percent slope toward the rock core.

30CFR817.72(b)(3)

(3) Grading may drain surface water away from the outslope of the fill and toward the rock core. In no case, however, may intermittent or perennial streams be diverted into the rock core. The maximum slope of the top of the fill shall be 33h:lv (3 percent). A drainage pocket may be maintained at the head of the fill during and after construction, to intercept surface runoff and discharge the runoff through or over the rock drain, if stability of the fill is not impaired. In no case shall this pocket or sump have a potential capacity for impounding more than 10,000 cubic feet of water. Terraces on the fill shall be graded with a 3 to 5 percent grade toward the fill and a 1 percent slope toward the rock core.

R645-301-731.610. Hydrologic Balance: Stream Buffer Zones. No land within 100 feet of a perennial stream or an intermittent stream or an ephemeral stream that drains a watershed of at least one square mile will be disturbed by coal mining and reclamation operations, unless the Division specifically authorizes coal mining and reclamation operations closer to, or through, such a stream. The Division may authorize such activities only upon finding that:

731.611. Coal mining and reclamation operations will not cause or contribute to the violation of applicable Utah or federal water quality standards and will not adversely affect the water quantity and quality or other environmental resources of the stream; and

731.612. If there will be a temporary or permanent stream channel diversion, it will comply with R645-301-742.300.

30CFR817.57 Hydrologic balance: Stream buffer zones.

- (a) No land within 100 feet of a perennial stream or an intermittent stream shall be disturbed by underground mining activities, unless the regulatory authority specifically authorizes underground mining activities closer to, or through, such a stream. The regulatory authority may authorize such activities only upon finding that—
- Underground mining activities will not cause or contribute to the violation of applicable State or Federal water quality standards and will not adversely affect the water quantity and quality or other environmental resources of the stream; and
 If there will be a temporary or permanent stream-channel diversion, it will comply
- (2) If there will be a temporary or permanent stream-channel diversion, it will comply with § 817.43.

- R645-301-742.320. Diversion of Perennial and Intermittent Streams and Ephemeral Streams that drain a watershed of at least one square mile.
- 742.321. Diversion of perennial and intermittent streams within the permit area may be approved by the Division after making the finding relating to stream buffer zones under R645-301-731.600. This applies to perennial and intermittent streams and ephemeral streams that drain a watershed of at least one square mile.
- **742.322.** The design capacity of channels for temporary and permanent stream channel diversions will be at least equal to the capacity of the unmodified stream channel immediately upstream and downstream from the diversion.
- **742.323.** The requirements of R645-301-742.312.2 will be met when the temporary and permanent diversion for perennial and intermittent streams and ephemeral streams that drain a watershed of at least one square mile are designed so that the combination of channel, bank and floodplain configuration is adequate to pass safely the peak runoff of a 10-year, 6-hour precipitation event for a temporary diversion and a 100-year, 6-hour precipitation event for a permanent diversion.
- **742.324.** The design and construction of all stream channel diversions of perennial and intermittent streams and ephemeral streams that drain a watershed of at least one square mile will be certified by a qualified registered professional engineer as meeting the performance standards of R645-301 and R645-302 and any design criteria set by the Division.

30CFR817.43(b)

- (b) Diversion of perennial and intermittent streams.
- (1) Diversion of perennial and intermittent streams within the permit area may be approved by the regulatory authority after making the finding relating to stream buffer zones
- called for in 30 CFR 817.57 that the diversions will not adversely affect the water quantity and quality and related environmental resources of the stream.
- (2) The design capacity of channels for temporary and permanent stream channel diversions shall be at least equal to the capacity of the unmodified stream channel immediately upstream and downstream from the diversion.
- (3) The requirements of paragraph (a)(2)(ii) of this section shall be met when the temporary and permanent diversions for perennial and intermittent streams are designed so that the combination of channel, bank and floodplain configuration is adequate to pass safely the peak runoff of a 10-year, 6-hour precipitation event for a temporary diversion and a 100-year, 6-hour precipitation event for a permanent diversion.

(4) The design and construction of all stream channel diversions of perennial and intermittent streams shall be certified by a qualified registered professional engineer as meeting the performance standards of this part and any design criteria set by the regulatory authority.

R645-301-742.330 Diversion of Miscellaneous Flows.

- 742.331. Miscellaneous flows, which consist of all flows except for perennial and intermittent streams and ephemeral streams that drain a watershed of at least one square mile, may be diverted away from disturbed areas if required or approved by the Division. Miscellaneous flows will include ground-water discharges and ephemeral streams that drain a watershed of less than one square mile.
- **742.332.** The design, location, construction, maintenance, and removal of diversions of miscellaneous flows will meet all of the performance standards set forth in R645-301-742.310.
- **742.333.** The requirements of R645-301-742.312.2 will be met when the temporary and permanent diversions for miscellaneous flows are designed so that the combination of channel, bank and floodplain configuration is adequate to pass safely the peak runoff of a 2-year, 6-hour precipitation event for a temporary diversion and a 10-year, 6-hour precipitation event for a permanent diversion.

30CFR817.43(c)

- (c) Diversion of miscellaneous flows.
- (1) Miscellaneous flows, which consist of all flows except for perennial and intermittent streams, may be diverted away from disturbed areas if required or approved by the regulatory authority. Miscellaneous flows shall include ground-water discharges and ephemeral streams.
- (2) The design, location, construction, maintenance, and removal of diversions of miscellaneous flows shall meet all of the performance standards set forth in paragraph (a) of this section.
- (3) The requirements of paragraph (a)(2)(ii) of this section shall be met when the temporary and permanent diversions for miscellaneous flows are designed so that the combination of channel, bank and flood-plain configuration is adequate to pass safely the peak runoff of a 2-year, 6-hour precipitation event for a temporary diversion and a 10-year, 6-hour precipitation event for a permanent diversion.

R645-301-742.412. No part of any road will be located in the channel of an intermittent or perennial stream <u>or an ephemeral stream that drains a watershed of at least one square mile</u> unless specifically approved by the Division in accordance with applicable parts of R645-301-731 through R645-301-742.300.

30CFR817.150(d)(1)

(d) Location. (1) No part of any road shall be located in the channel of an intermittent or perennial stream unless specifically approved by the regulatory authority in accordance with applicable §§ 817.41 through 817.43 and 817.57 of this chapter.

Rationale for Rule Change: This rule amendment deletes the portion of the intermittent stream definition of one that drains a watershed of at least one square mile, and correspondingly adds ephemeral streams that drain a watershed of at least one square mile into every performance standard rule where the term intermittent stream is used. The purpose of this rule change is to adopt more hydrologically accurate definitions of intermittent stream and ephemeral stream into the coal rules.

The Utah Mining Association raised the concern that the definition of intermittent stream was overly inclusive by including characteristics of ephemeral streams, thus, leading to confusion when the terms of intermittent stream and ephemeral stream were used in the rules. In order to remain no less effective than the federal regulations, the ephemeral stream that drains a watershed of at least one square mile was inserted into the performance standards along with the modified intermittent stream definition. Our research indicated Colorado's program passed an amendment very similar to this one also.

STATE OF UTAH

OFFICE OF THE ATTORNEY GENERAL



MARK L. SHURTLEFF

RAYMOND HINTZE CHIEF DEPUTY

Protecting Utah . Protecting You

KIRK TORGENSEN CHIEF DEPUTY

May 28, 2008

James Fulton, Chief Office of Surface Mining Denver Field Division P. O. Box 46667 Denver, CO 80201-6667

VIA EMAIL: JFulton@osmre.gov and cbelka@osmre.gov

Re: Formal Rule Changes to Rules

Dear Mr. Fulton:

Please consider this letter as verification by the Utah Attorney General's Office that the following identified rules changes do not conflict with any other provision of the existing laws of the State of Utah or its Regulations. This letter is submitted as part of the submittal required by Western Region guidelines for program amendments.

The rules that were reviewed for this opinion are classified under three headings; (1) Catchall Statements or requests for additional information, R 645-300-131.100 to 131.300 (addition of new section 131.300); (2) Sealing of wells, R645-301-551, 301-631, 301-631.200, and 301-765; and (3) Intermittent Stream, R 645-100-200, R645-301-535.210, 301-535.223, 301-731.6110, 301-731.611, 301-731.612, 301-741.320 through 742.324, 301-742.330 through 742.333, and 301-742.412. Each of the above referenced changes is compatible with existing Utah Law and Regulations.

Please contact me if I can be of further assistance in facilitating the above verification.

Sincerely,

Steven F. Alder

Assistant Attorney General

cc: John Baza, Director